

AMENDMENT AND CLAIM LISTING

Please amend the claims as follows:

Claim 1 (currently amended)

1. A method for curing a composite

material comprising the steps of:

providing a curing light that includes

~~a wand adapted to be grasped by a human hand for use in positioning and manipulating the curing light,~~

an elongate heat sink with a proximal end and a distal end, ~~said proximal end being proximate said wand~~, said elongate heat sink having a longitudinal axis,

a mounting platform located at said elongate heat sink distal end, said mounting platform being adapted to have a light emitting diode (LED) LED-chip module mounted on it, and

an LED chip module mounted on said mounting platform, said LED chip module including

a primary heat sink, said primary heat sink having a smaller mass than said elongate heat sink,

a well on said primary heat sink for mounting an LED chip,

an LED chip mounted in said well,

a cover that provides protective covering for said LED chip and which permits light emitted by said LED chip to pass through it to provide usable light exiting from said light LED chip module,

powering said LED chip with a pulsed current input at power level I in alternating periods of generally constant intensity current input to the LED chip followed by periods of rest with no current input, said pulsed current input being used to avoid excessive

heat buildup in said LED chip which would decrease emission of light from said LED chip,

permitting light to be output from the curing light at an average power output level that resembles a ~~continue-wave~~ continuous wave output in use,

applying said light to a composite material to be light cured.

Claim 2 (currently amended) 2. A method as recited in claim 1 wherein said average power output level is greater than the power output level that would result from powering the same chip with a continuous current input at power level I instead of pulsed current input.

Claim 3 (original) 3. A method as recited in claim 1 wherein said light output from the curing light is output at an angle of from about 30 degrees to about 150 degrees with respect to said longitudinal axis.

Claim 4 (currently amended) 4. A method as recited in claim 1 wherein power level I is from about 25 millamps to about 2 amps.

Claim 5 (currently amended) 5. A method as recited in claim 1 wherein power level I is from about 350 millamps to about 1.2 amps of current.

Claim 6 (currently amended) 6. A method as recited in claim 1 wherein power level I is more than about 100 millamps of current.

Claim 7 (currently amended) 7. A method for curing a composite material comprising the steps of:
 providing a curing light that includes

a wand adapted to be grasped by a human hand for use in positioning and manipulating the curing light, said wand having a longitudinal axis, a secondary heat sink, said elongate heat sink having a longitudinal axis, a primary heat sink attached to said secondary heat sink, and

a light emitting semiconductor chip attached to said primary heat sink, powering said chip with a pulsed current input at power level I in alternating periods of generally constant intensity current input to the chip followed by periods of rest with no current input,

permitting light to be output from the curing light at an average power output level that resembles a continue wave output in use, said pulsed current input being used to avoid excessive heat buildup in said semiconductor chip which would decrease emission of light from said semiconductor chip,

applying said light to a composite material to be light cured.

Claim 8 (currently amended) 8. A method as recited in claim 7 wherein said average power output level is greater than the power output level that would result from powering the same chip with a continuous current input at power level I instead of pulsed current input.

Claim 9 (original) 9. A method as recited in claim 7 wherein said light output from the curing light is output at an angle of from about 30 degrees to about 150 degrees with respect to said longitudinal axis.

Claim 10 (currently amended) 10. A method as recited in claim 7 wherein power level I is from about 25 millamps to about 2 amps.

Claim 11 (currently amended) 11. A method as recited in claim 7 wherein power level I is from about 350 millamps to about 1.2 amps of current.

Claim 12 (currently amended) 12. A method as recited in claim 7 wherein power level I is more than about 100 millamps of current.

Claim 13 (currently amended) 13. A method for curing a composite material comprising the steps of:

providing a curing light that includes

~~a wand adapted to be grasped by a human hand for use in positioning and~~

~~manipulating the curing light, said wand having a longitudinal axis,~~

a primary heat sink, and

a light emitting semiconductor chip attached to said primary heat sink,

a plurality of epitaxial layers in said light emitting semiconductor chip,

at least one of said epitaxial layers being an active layer which emits photons when bombarded with electrons,

powering said chip with a pulsed current input at power level I in alternating periods of generally constant intensity current input to the chip followed by periods of rest with no current input, , said pulsed current input being used to avoid excessive heat buildup in said semiconductor chip which would decrease emission of light from said semiconductor chip,

permitting said current input to said chip to cause photons to be emitted by said active layer of said chip,

permitting said photons to exit the curing light as light, said light output from the curing light having an average power output level, and

applying said light to a composite material to be light cured.

Claim 14 (currently amended) 14. A method as recited in claim 13 wherein said light output has an average power level is greater than the light output power level that would result from powering said chip a continuous current input at power level I instead of pulsed current input.

Claim 15 (original) 15. A method as recited in claim 13 wherein said light output from the curing light is output at an angle of from about 30 degrees to about 150 degrees with respect to said longitudinal axis.

Claim 16 (currently amended) 16. A method as recited in claim 13 wherein power level I is from about 25 millamps to about 2 amps.

Claim 17 (currently amended) 17. A method as recited in claim 13 wherein power level I is from about 350 millamps to about 1.2 amps of current.

Claim 18 (currently amended) 18. A method as recited in claim 13 wherein power level I is more than about 100 millamps of current.